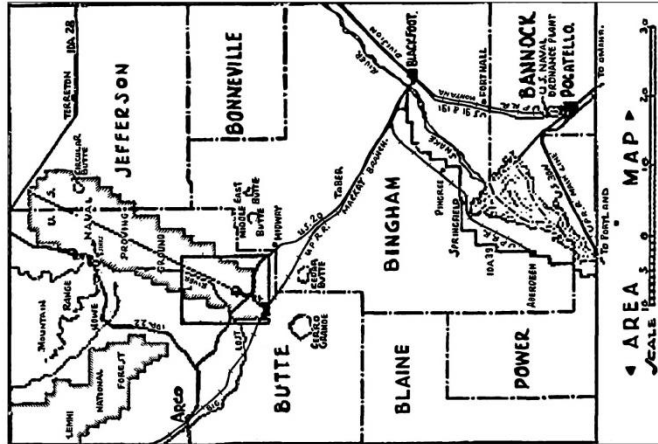


6 REDUCED COPIES OF ARCO NPG MAPS

The following maps are reduced scale, electronic copies of the Arco NPG maps produced from information gathered during archival research and field survey for this HALS documentation; map order and subject are listed below.

Sheet 1	Title Sheet
Sheet 2	Arco NPG and Bombing Ranges, 1943
Sheet 3	Scoville, NPG, 1943
Sheet 4	Proofing Area, Scoville, 1943
Sheet 5	Residential Area, Scoville, 1943
Sheet 6	Scoville, NPG, 1946
Sheet 7	Proofing Area, Scoville, 1946
Sheet 8	Residential Area, Scoville, 1946
Sheet 9	Mass Detonation Area, 1945
Sheet 10	Scale Model, Barrier Wall, and Railcar Detonation Sites, 1945-1946
Sheet 11	Mass Detonation Area, 1946
Sheet 12	INL, 2014
Sheet 13	CFA, INL, 2014

• U.S. NAVAL PROVING GROUND •
• ARCO • IDAHO •



Above: Reproduction of an original vicinity map for the Arco Naval Proving Ground, dated February, 1942 (JNL Drawing Number 112099, CF-101 USN-5).
The proximity of the Arco Naval Proving Ground to the U.S. Naval Ordnance Plant is illustrated, as well as the transportation infrastructure provided by the existing Union Pacific Railroad.

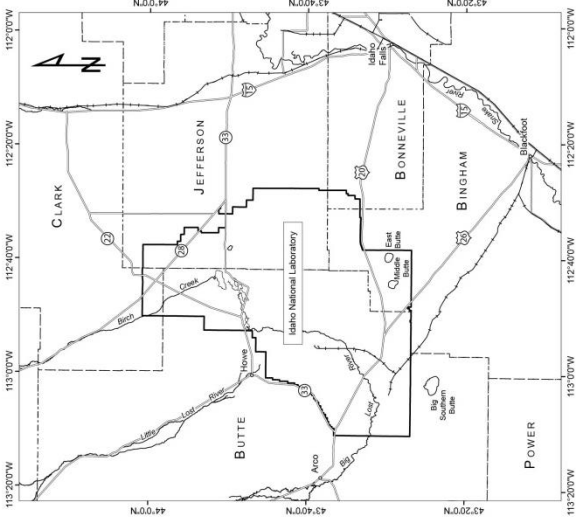
The Arco Naval Proving Ground (NPG) was one of five specialized ordnance facilities established in the nation during World War II that conducted research and experiments. Victory in the Pacific theater relied partly on the performance of battleship guns and the Arco NPG was the only proving ground where the Big Guns used by the Pacific Fleet were tested. The Arco NPG was the terminus of an elaborate logistical system that began with the guns on ships like USS Missouri and USS Wisconsin. After repeated combat firing wore out the rifling, the guns were shipped to the coast, sent by rail overland to Pocatello, reloaded, sent to the proving ground, test-fired, and scored for accuracy. The guns then returned to action the way they had come and entered battle once more.

In addition to naval ordnance testing, the U.S. Navy allowed the Army to use lands adjacent to the Arco NPG for high altitude aerial bombing ranges. Over 40,000 pilots were trained at the Pocatello Army Air Base and many flew day and night training missions over Twin Buttes Bombing Range and Arco High Altitude Bombing Range. Hundreds of men lost their lives while doing so, including seven men whose B-24 Liberator went down near Twin Buttes Bombing Range while on a night mission. Later, the two military branches joined forces to conduct tests that contributed greatly to determining safe storage and transport of conventional ordnance.

The Arco NPG provided the core setting for the present-day Idaho National Laboratory. Infrastructure such as roads and rail sidings influenced the location of later facilities. Beyond the proving and residential centers, the NPG had altered the desert landscape. Explosives tests and gun firings required their own infrastructure such as concrete and wood targets and camera and instrument shelters. The tests and firings produced impact craters and left a variety of ruins on the desert floor — piles of shattered concrete and twisted metal, wood pieces and window glass shards, bomb shells and even unexploded projectiles. The latter, a hazardous legacy that remained unattended until many decades later.

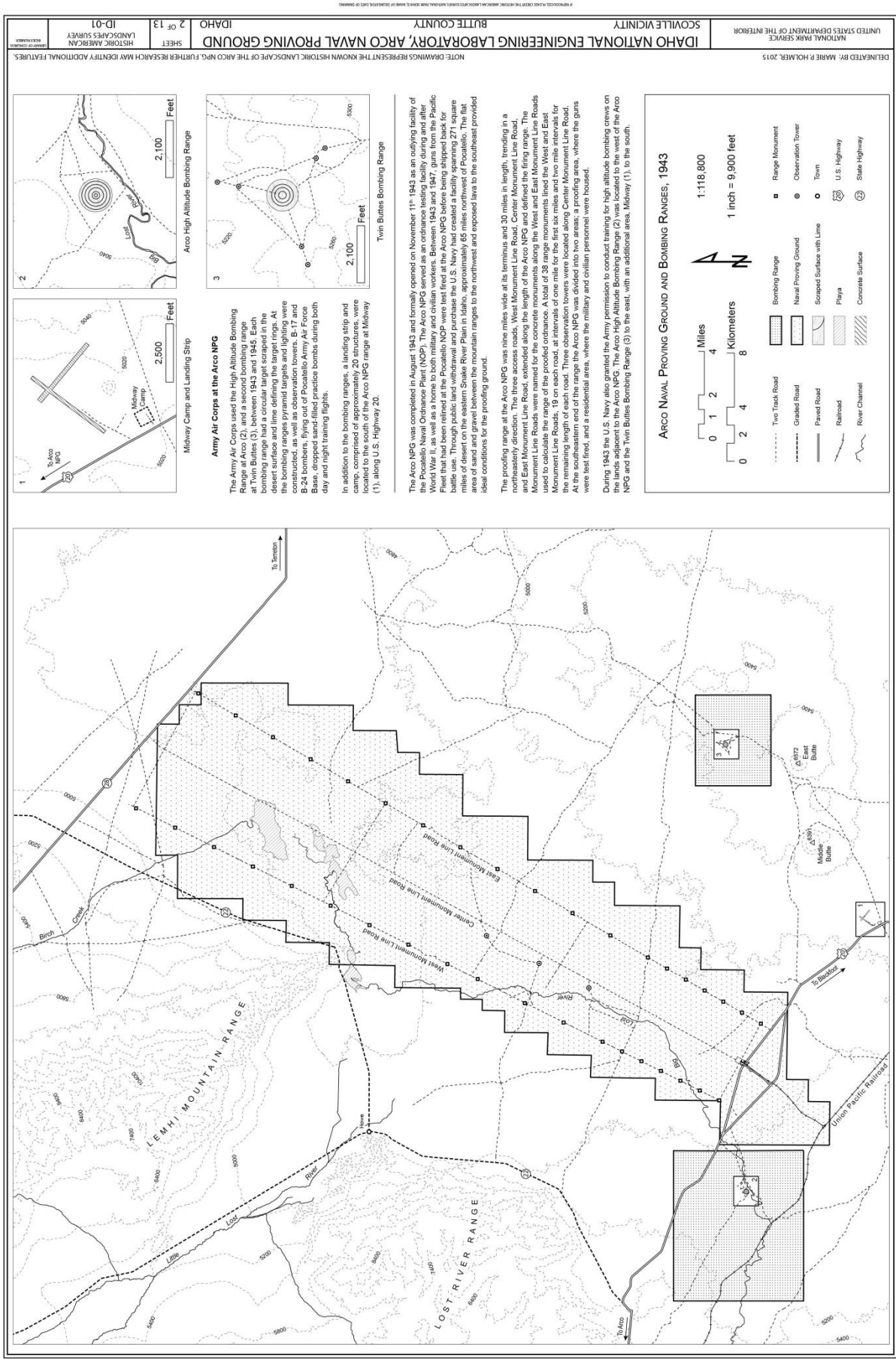
Aside from being a tribute to the logistical excellence of the U.S. military, the NPG's association with the great battleships of the war and with World War II and postwar military research and testing are nationally significant. The NPG was the only proving ground of its kind west of the Mississippi River and is one of very few sites in Idaho that contributed to American victory during World War II, in addition to revisiting national standards for the safe storage and transport of conventional ordnance.

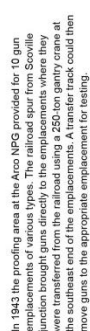
Based on evaluations conducted in 1983 and 1987, historians determined that the then-remaining Arco NPG structures, currently within the boundary of Idaho National Laboratory, were significant to the nation's history through their association with World War II. Through ensuring discussions with the Idaho State Historic Preservation Office (SHPO), it was further determined that the infrastructure and associated landscape were also significant. In early 2013, the Department of Energy Idaho Operations Office (DOE-ID) notified the Idaho SHPO, the Advisory Council on Historic Preservation (ACHP), and DOE-Headquarters Federal Preservation Officer, of their intent to demolish the vacant buildings World War II buildings. Through the National Historic Preservation Act (NHPA) Section 108 consultation process, measures to mitigate the adverse impacts of demolition were determined and agreed to through a Memorandum of Agreement (MOA) between DOE-ID, the Idaho SHPO, and ACHP. The completion of a Historic American Landscape Survey (HALS) was undertaken as part of this mitigation process by the staff of the Cultural Resource Management Office at Idaho National Laboratory.



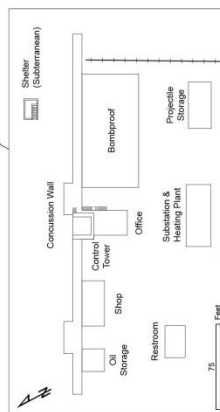
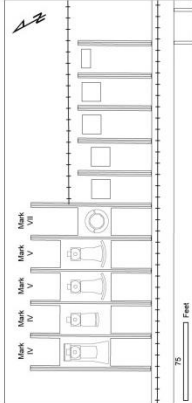
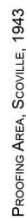
INDEX FOR DRAWING SHEETS

SHEET 2	ARCO NAVAL PROVING GROUND AND BOMBING RANGES, 1943	SHEET 5	RESIDENTIAL AREA, SCOVILLE, 1943	SHEET 8	RESIDENTIAL AREA, SCOVILLE, 1946	SHEET 11	MASS DETONATION AREA, 1946
SHEET 3	SCOVILLE, NAVAL PROVING GROUND, 1943	SHEET 6	SCOVILLE, NAVAL PROVING GROUND, 1946	SHEET 9	MASS DETONATION AREA, 1945	SHEET 12	IDAHO NATIONAL LABORATORY, 2014
SHEET 4	PROOFING AREA, SCOVILLE, 1943	SHEET 7	PROOFING AREA, SCOVILLE, 1946	SHEET 10	SCALE MODEL, BARRIER WALL AND ROLLER DETONATION SITES, 1945-46	SHEET 13	CENTRAL FACILITIES AREA, IDAHO NATIONAL LABORATORY, 2014

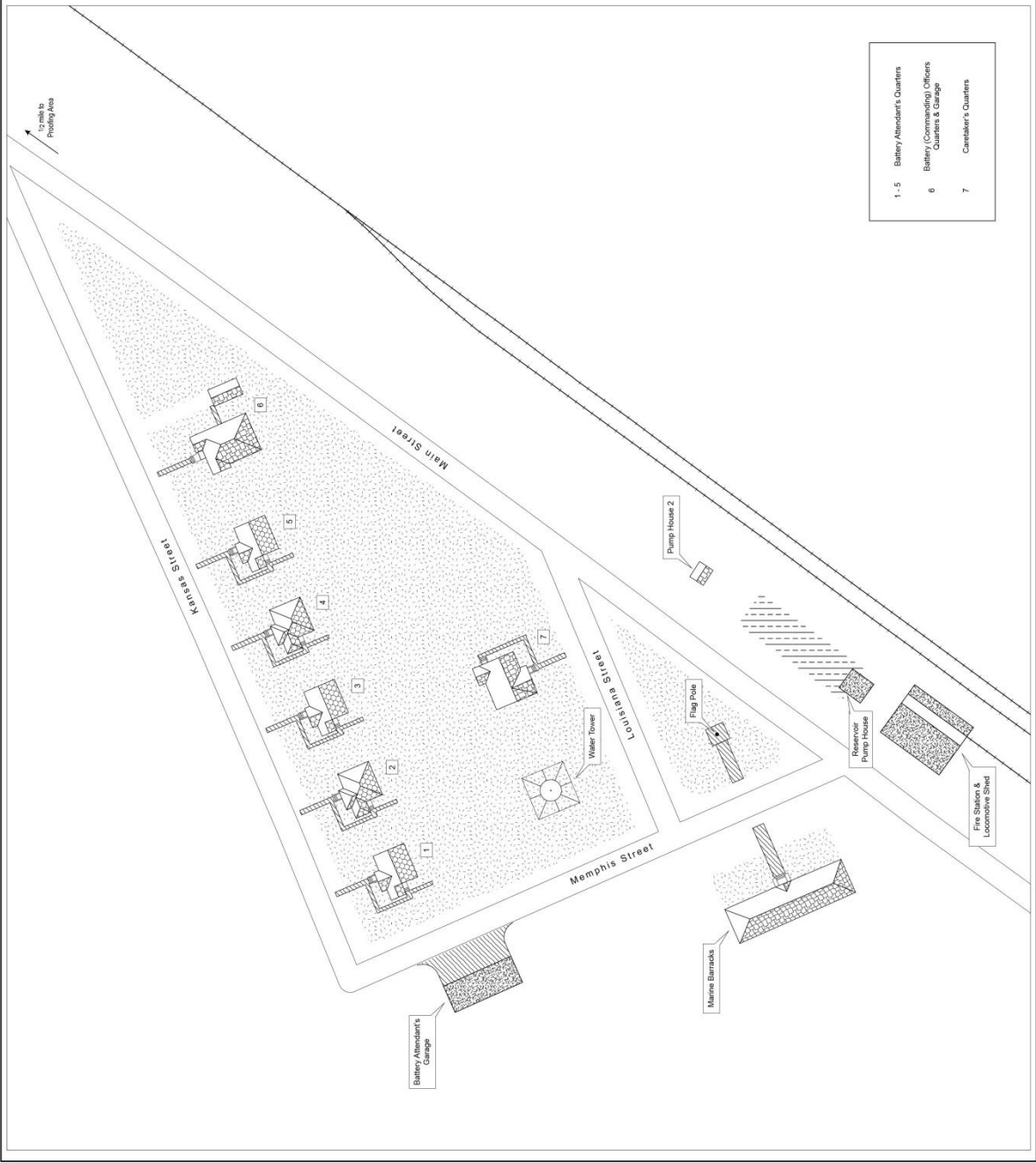
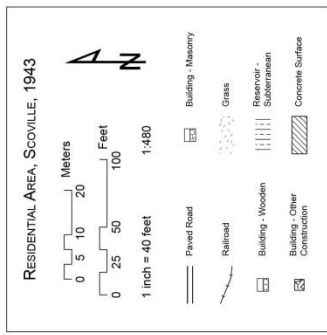




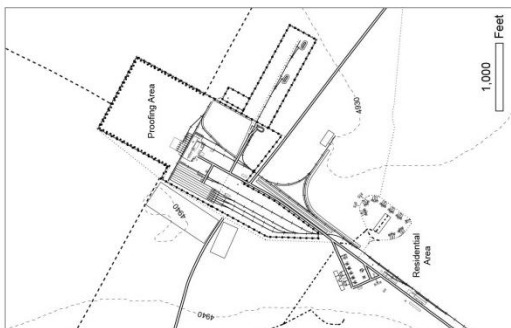
The gun emplacements were separated from the rest of the proofing area by an 8-foot thick, 315-foot long reinforced concrete concussion wall. An exception being an underground shelter for personnel located between the concussion wall and the gun emplacements. Adjacent to the concussion wall were bombproof offices, shop and oil storage areas, a reinforced concrete tower and walkway. Additional proofing area structures included restrooms, projectile storage and infrastructure equipment, including a salivation, healing plant and one of two well pump houses at the AUC NPC. These earth covered bunkers, power plant, testing supplies, and a standard magazine, provided storage for testing supplies. All of the proofing activities were contained within a fenced area past the gun emplacements were concrete patrol light structures, illuminating the fence line and beyond.



The second of two well pump houses was located on Main Street in the residential area, along side a pump house for an underground reservoir. An elevated water tower was also constructed next to the caretaker's quarters. The locomotive shed, garage and fire station were all located in a single building at the southern end of the residential area. Finally, a flag pole located in front of the marine barracks completed the residential area at the time of opening in 1943.

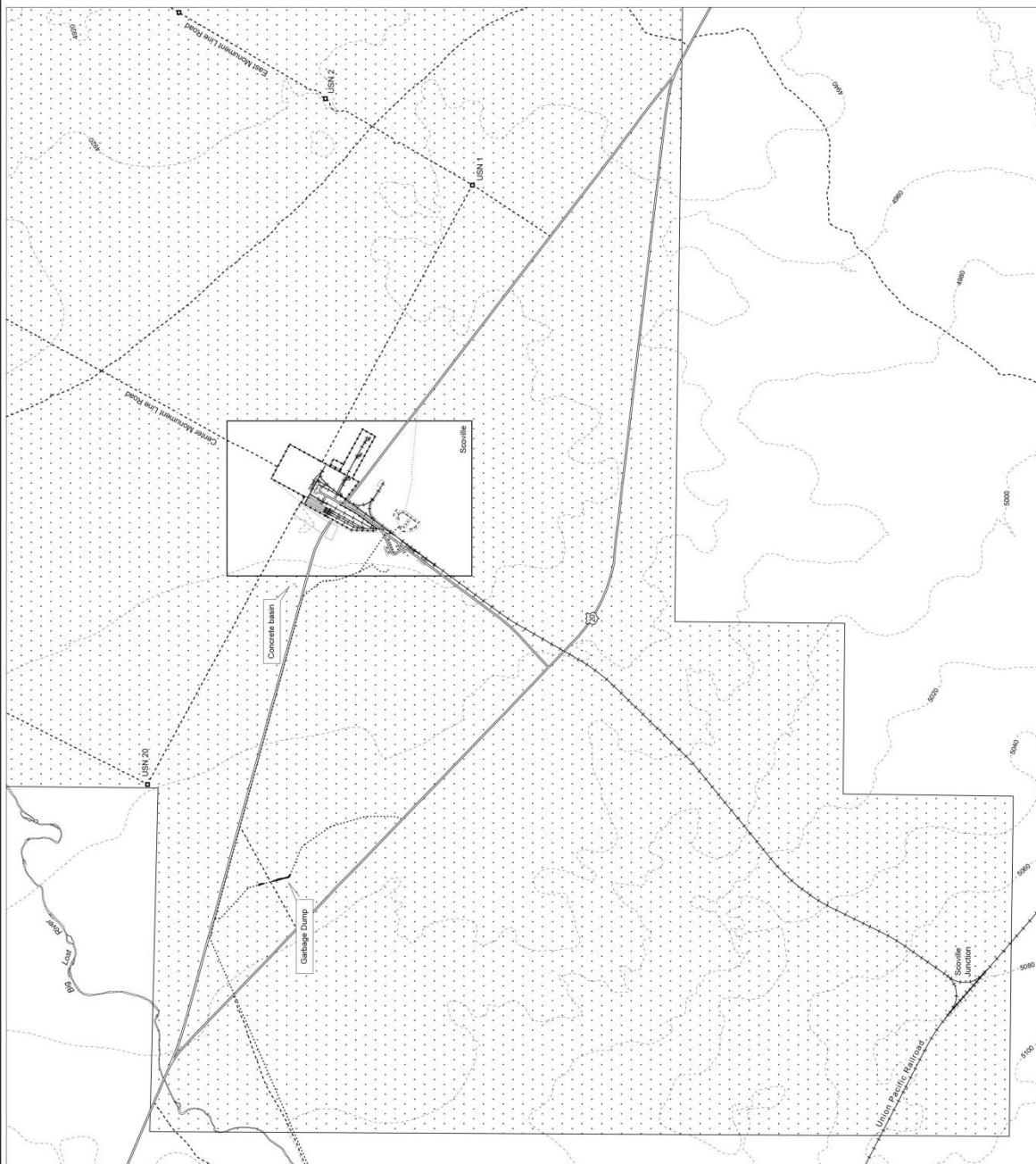
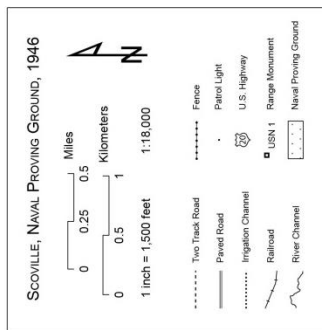


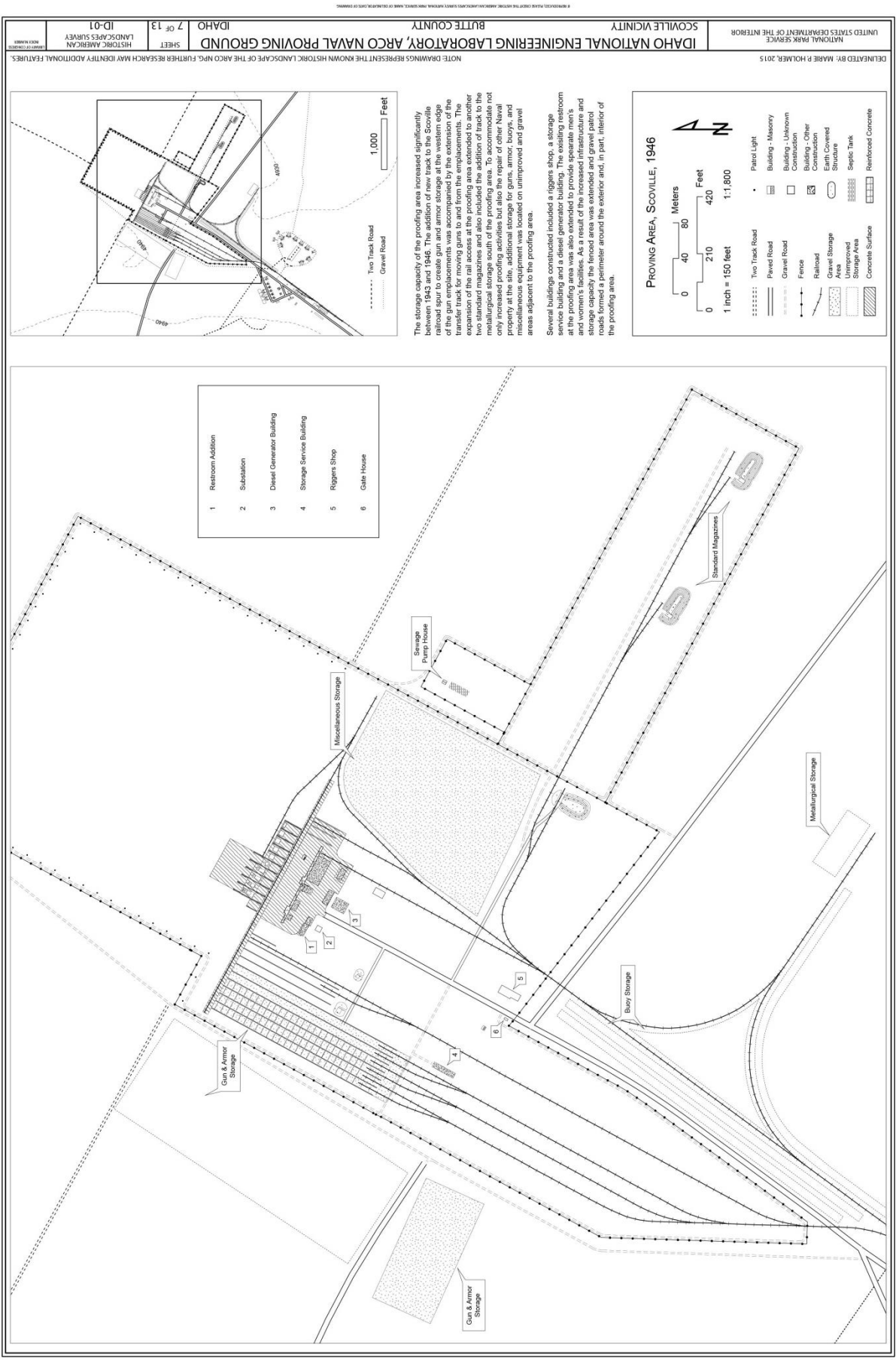
NOTE: DRAWINGS REPRESENT THE KNOWN HISTORIC LANDSCAPE OF THE ARCO NPGL. FURTHER RESEARCH MAY IDENTIFY ADDITIONAL FEATURES.

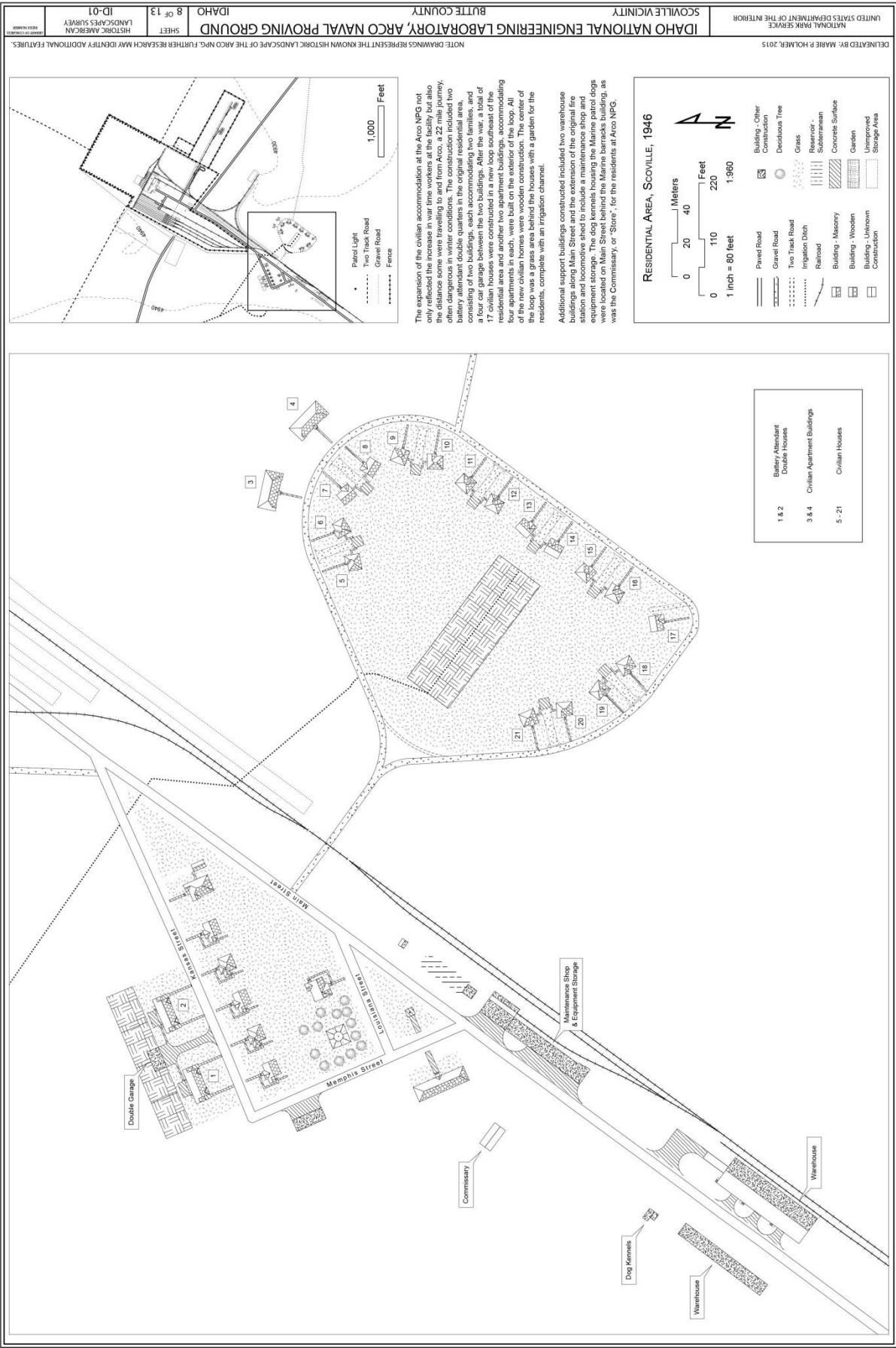


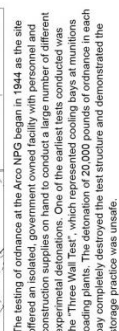
In the years immediately following the construction of the Arco NPG, the residents of the facility, both African and residential, continued to grow. From 1943, as the residential area saw the addition of a civilian hospital, as well as buildings to support operations at the Arco NPG. The construction of two battery attendant's double houses to replace the original civilian houses was followed by a new civilian development after the war when two apartment buildings and 17 houses were built in a loop south of Main Street. The permanent residence of personnel at the remote location required the addition of a garbage dump, which was located to the west of the residential area in an abandoned section of historic irrigation channel between the old and new sections of U.S. Highway 20. The increased civilian population also saw the addition of another irrigation channel to accommodate the gardens of the more recent permanent residents.

Beginning in 1944 the proofing range beyond the immediate Scoville area took on an additional role as an explosive safety testing site. The large amount of munitions produced during World War II necessitated a review of the existing safe storage guidelines to accommodate increased capacity and proximity to inhabited buildings. Numerous controlled detonations took place at the Arco NPG to establish new safe storage parameters under a variety of experimental conditions.









The mass detonation area, located on the proofing range at the Alcora Ranges, was standard for the large scale experimental testing of Army and Navy standard magazines, or igloos, beginning in 1945. Between August 29th and October 31st of that year a total of seven tests were conducted to assess the impact of detonation in one igloo on the integrity of the remaining igloos which were loaded with ordnance. A wooden barricade was constructed to assess damage at existing locations. Recommendations for inhibited buildings. A total of seven agencies took part in recording the experiments from instrument stations across the area while cameras demonstrated the detonations from concrete bunkers. These tests demonstrated the differences between igloos could be safely reduced but the inhabited building distance tested could not guarantee the safety of the people inside.

